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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,260

10/05/2004

Timothy J Mousley

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

08/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/510,260

Applicant(s)

MOULSLEY ET AL.

Examiner

Perez M. Angelica

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 3 and 4 are objected to because of the following informalities: in lines 2 and 2-3, respectively "signalling" should be "signaling". Appropriate correction is required.

Allowable Subject Matter

2. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, are rejected under 35 U.S.C. 103(a) as being unpatentable over Geraloulis, Diakoumis Parissis (Geraloulis, US 20020101835A1) in view of Wang et al. (Wang, US005933763A).

Regarding claims 1 and 13, Geraloulis teaches of a communication system and method having a downlink data channel for the transmission of data packets from a primary station to a secondary station (figure 2, "Orthogonal Data Traffic Channel, Forward Link"), a first uplink control channel for the transmission of information relating to reception of data packets from the secondary station to the primary station (figure 2,

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"Orthogonal Data Traffic Channel, Reverse Link"), and a second uplink control channel for the transmission of pilot information (figure 2, "Contention Access Channel, Reverse Link"), the secondary station having receiving means for receiving a data packet and acknowledgement means for transmitting a status signal on the first control channel to the primary station to indicate the status of a received data packet (figure 4A, "acknowledgement message").

Geraloulis does not specifically teach where the secondary station comprises power control means for temporarily increasing the transmission power of at least the part of the second control channel including pilot information for a predetermined period during which the status signal is transmitted.

In related art concerning a circuitry and method for improved signal reception acknowledgment in a radio communication system, Wang teaches where the secondary station comprises power control means for temporarily increasing the transmission power of at least the part of the second control channel including pilot information for a predetermined period during which the status signal is transmitted (column 4, lines 50-57, "...increased power level, thereby to increase the probability of successful communication of the paging signal).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's wireless system configuration with Wang's power increase when delivering an acknowledgment in order to increase the probability of successful communication of the paging signal, as taught by Wang.

Regarding claim 6, Geraloulis teaches of a secondary station for use in a communication system having a downlink data channel for the transmission of data packets from a primary station to a secondary station (figure 2, "Orthogonal Data Traffic Channel, Forward Link"), a first uplink control channel for the transmission of information relating to reception of data packets from the secondary station to the primary station (figure 2, "Orthogonal Data Traffic Channel, Reverse Link"), and a second uplink control channel for the transmission of pilot information (figure 2, "Contention Access Channel, Reverse Link"), where receiving means are provided for receiving a data packet from the primary station and acknowledgement means are provided for transmitting a status signal on the first control channel to the primary station to indicate the status of a received data packet (figure 4A, where the status signal is an "acknowledgement message").

Geraloulis does not specifically teach where power control means are provided for temporarily increasing the transmission power of at least the part of the second control channel including pilot information for a predetermined period during which the status signal is transmitted.

Wang teaches where power control means are provided for temporarily increasing the transmission power of at least the part of the second control channel including pilot information for a predetermined period during which the status signal is transmitted (column 4, lines 50-57, "...increased power level, thereby to increase the probability of successful communication of the paging signal).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's wireless system configuration with Wang's power increase when delivering an acknowledgment in order to increase the probability of successful communication of the paging signal, as taught by Wang.

Regarding claim 11, Geraloulis and Wang teach all the limitations of claim 6. Wang further teaches of means are provided for resetting a timer on detection of an indication that a data packet has been transmitted to the secondary station and in that the predetermined period lasts until the timer expires (column 5, lines 12-18).

5. Claims 2-4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geraloulis, Diakoumis Parissis (Geraloulis, US 20020101835A1) in view of Wang and further in view of Hwang, Seung-Hoon (Hwang, US 007203182B2).

Regarding claim 2, Geraloulis teaches of a primary station for use in a communication system having a downlink data channel for the transmission of data packets from the primary station to a secondary station (figure 2, "Microport" and "Orthogonal Data Traffic Channel, Forward Link"), a first uplink control channel for the transmission of information relating to reception of data packets from the secondary station to the primary station (figure 2, "Orthogonal Data Traffic Channel, Reverse Link"), and a second uplink control channel for the transmission of pilot information (figure 2, "Contention Access Channel, Reverse Link"), where means are provided for receiving a status signal on the first control channel indicating the status of a data packet transmitted to the secondary station (figure 4A, where the status signal is an "acknowledgement message"),

Geraloulis does not specifically teach where closed loop power control means are provided for controlling the power of the uplink control channel, and means are provided for adjusting the operation of the power control means for a predetermined period around a time when transmission of a status signal by the secondary station is expected to take into account a temporary increase of the transmission power of at least the part of the second control channel including pilot information.

Wang teaches of means for adjusting the operation of the power control means for a predetermined period around a time when transmission of a status signal by the secondary station is expected to take into account a temporary increase of the transmission power of at least the part of the second control channel including pilot information (column 4, lines 50-57, "...increased power level, thereby to increase the probability of successful communication of the paging signal", where means to increase the power are required).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's wireless system configuration with Wang's power increase when delivering an acknowledgment in order to increase the probability of successful communication of the paging signal, as taught by Wang.

In related art concerning a method of link adaptation of blind type using acknowledgements in ARQ system, Hwang teaches where closed loop power control means are provided for controlling the power of the uplink control channel (column 3, lines 53-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's and Wang's wireless system configuration with Hwang's closed-loop power control technique in order to maintain the traffic quality of the forward traffic channel, as taught by Wang.

Regarding claim 3, Geraloulis, Wang and Hwang teach all the limitations of claim 2. Hwang further teaches where means are provided for signaling to the secondary station the magnitude of the power increase which should be applied (column 3, lines 53-67, where the BS comprises a transmitter that transmits information regarding the power adjustment necessary).

Regarding claim 4, Geraloulis, Wang and Hwang teach all the limitations of claim 3. Hwang teaches where means are provided for signaling a change in another parameter at the same time as a power offset is signaled (column 4, lines 23-37, where the SIR is the other parameter).

Regarding claim 12, Geraloulis and Wang teach all the limitations of claim 6.

Geraloulis and Wang do not specifically teach where means are provided for communicating substantially simultaneously with a plurality of primary stations, for receiving power control commands from each of the primary stations and for receiving a data packet from any one of the primary stations, characterised in that means are provided for setting the power of uplink transmissions depending on power control commands received from the primary station which transmitted the packet for the duration of the predetermined period.

Hwang teaches where closed loop power control means are provided for controlling the power of the uplink control channel (column 3, lines 53-67, where closed loop power control is described).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's and Wang's wireless system configuration with Hwang's closed-loop power control technique in order to maintain the traffic quality of the forward traffic channel, as taught by Wang.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geraloulis in view of Wang and Hwang and further in view of Das et al. (Das, US 2003/0157953A1).

Regarding claim 5, Geraloulis, Wang and Hwang teach all the limitations of claim 4.

Geraloulis, Wang and Hwang do not specifically teach where the other parameter is the number of repetitions of a status signal.

In related art concerning express signaling in a wireless communication system, Das teaches where the other parameter is the number of repetitions of a status signal (paragraph 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's, Wang's and Hwang's wireless system configuration with Das's number of repetitions in order to indicate a number of retransmissions that can be considered acceptable and save resources.

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6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geraloulis in view of Wang and further in view of Tiedemann Jr. et al. (Tiedemann, US006035209A).

Regarding claim 7, Geraloulis and Wang teach all the limitations of claim 6.

Geraloulis and Wang do not specifically teach where the amount by which the transmission power is increased at the start of the predetermined period is different from the amount by which the power is decreased at the end of the predetermined period.

In related art concerning a method and apparatus for performing fast power control in a mobile communication system, Tiedemann teaches where the amount by which the transmission power is increased at the start of the predetermined period is different from the amount by which the power is decreased at the end of the predetermined period (column 8, lines 3-22, where the energy is proportional to power and where the initial and ending power are different).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's and Wang's wireless system configuration with Tiedemann's adjustment of power in order to save power.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geraloulis in view of Wang and further in view of Miki et al. (Miki, US007185256B2).

8. Regarding claim 8, Geraloulis and Wang teach all the limitations of claim 6.

Geraloulis and Wang teach of means for increasing the transmission power by different amounts depending on whether the status signal is an acknowledgement or a negative acknowledgement.

In related art concerning a communication system and method employing automatic repeat request, Miki teaches of means for increasing the transmission power by different amounts depending on whether the status signal is an acknowledgement or a negative acknowledgement (column 9, lines 13-21 and 53-59 and figure 4, item 82).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's Wang's wireless system configuration with Miki's's differing power levels depending on ACK/NACK in order to maintain constant reception quality.

Regarding claim 9, Geraloulis and Wang teach all the limitations of claim 6.

Miki teaches of means are provided for increasing the transmission power by a first amount at the start of the predetermined period and by a second amount when the type of status signal to be transmitted has been determined, the second amount depending on whether the status signal is an acknowledgement or a negative acknowledgement (column 9, lines 13-21 and 53-59 and figure 4, item 82, where the change in power are done periodically and performed as required).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geraloulis's Wang's wireless system configuration with Miki's differing power levels depending on ACK/NACK in order to maintain constant reception quality.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.



Angelica Perez
Examiner



Matthew D. Anderson
Supervisory Patent Examiner

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July 30, 2007